

WHAT IS CLAIMED IS:

1. A method of manufacturing an electron-emitting device, comprising:

(A) arranging on a substrate a member
5 comprising a first electroconductive layer blanketing the substrate, a layer containing at least one of materials composing an electron-emitting element blanketing the first electroconductive layer, a protective layer blanketing the layer containing at
10 least one of materials forming an electron-emitting element, a second electroconductive layer blanketing the protective layer, an insulating layer blanketing the second electroconductive layer, and a third electroconductive layer blanketing the insulating
15 layer;

(B) forming an opening, which extends from a surface of the third electroconductive layer to the protective layer, by dry etching; and

(C) wet-etching the protective layer through
20 the opening to expose a portion of the layer containing at least one of the materials forming the electron-emitting element.

2. A method of manufacturing an electron-emitting device according to claim 1, wherein the
25 protective layer is made of a material having a lower etching rate than the second electroconductive layer.

3. A method of manufacturing an electron-emitting device according to claim 1, wherein the protective layer is made of a metal.

5 4. A method of manufacturing an electron-emitting device according to claim 1, wherein the protective layer is made of one of a silicon nitride and a silicon oxide.

10 5. A method of manufacturing an electron-emitting device according to claim 1, wherein the first electroconductive layer composes a cathode electrode, the second electroconductive layer composes a focusing electrode, and the third
15 electroconductive layer composes a gate electrode.

6. A method of manufacturing an electron-emitting device according to claim 1, wherein the electron-emitting element contains mainly carbon.

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7. A method of manufacturing an electron-emitting device according to claim 1, wherein the electron-emitting element is one of diamond, diamond-like carbon, and a carbon fiber.

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8. A method of manufacturing an electron source including a plurality of electron-emitting devices,

the method comprising:

manufacturing the electron-emitting devices by
the manufacturing method according to claim 1.

5 9. A method of manufacturing an image display
device including an electron source and a light
emitting member that emits light by electron
irradiation, the method comprising:

 manufacturing the electron source by the
10 manufacturing method according to claim 8.